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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/086,762	02/28/2002	Robert Groten	22750/434A	1346
26646	7590	08/30/2004	EXAMINER	
KENYON & KENYON ONE BROADWAY NEW YORK, NY 10004			DEL SOLE, JOSEPH S	
			ART UNIT	PAPER NUMBER

1722

DATE MAILED: 08/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/086,762

Applicant(s)

GROTEN ET AL.

Examiner

Joseph S. Del Sole

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-18 is/are pending in the application.
- 4a) Of the above claim(s) 18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
 - 2) ☒ Certified copies of the priority documents have been received in Application No. 09/515,866.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Claim 18 is withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the response of 10/22/03.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 13 and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Proulx (5,814,176).

Proulx teaches a die system (Fig 1, #28) having a polymer source (Fig 1, #20); a die in communication with the polymer source; a die plate (Fig 6) in fluid communication with the die, the die plate defining a first group of openings (Fig 8), the first group of openings having a first opening and a second opening, the first opening and the second opening configured to form at least two elementary polymer filaments (Fig 8); the first opening and the second opening sized, shaped and positioned to accommodate and account for the polymer in the die and the rheological conditions that the polymer is under in the die, such that the polymer exiting the first opening of the die plate exits as a first bead and such that the polymer exiting the second opening of the die plate exits as a second bead, the first bead and the second bead contacting one another after exiting the respective die openings of the die plate (Fig 6 shows the beads of each material contacting one another); the die plate defines a second group of openings, the second group having a third opening and a fourth opening, the third opening and the fourth opening configured to form at least two elementary polymer filaments including a third elementary fiber having a skin and a fourth elementary fiber having a skin (Fig 8) and further sized, shaped and positioned to accommodate and account for the polymer in the die and the rheological conditions that the polymer is under in the die, such that the polymer exiting the first opening of the die plate exits as a first bead and such that the

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polymer exiting the second opening of the die plate exits as a second bead, the first bead and the second bead contacting one another after exiting the respective die openings of the die plate (Figures 6 and 8); a die plate having a first opening and a second opening, the distance between the first opening and the second opening is equal to or greater than a quarter of the sum of the diameters of the first opening and the second opening and the distance between the first opening and the second opening is less than or equal to the sum of the diameters of the first opening and the second opening (col 3, line 62 - col 4, line 16).

Proulx fails to explicitly teach the polymer source maintaining a polymer under predetermined rheological conditions and the die maintaining the polymer under predetermined rheological conditions.

Proulx does however teach continuous manufacture of polymer strands that remain identical in composition throughout the strand; such continuous production requires predetermined rheological conditions to remain unchanging.

It would have been obvious to one having ordinary skill in the art at the time of the Applicant's invention to have modified the invention of Proulx such that the polymer source and the die maintain the polymer under predetermined rheological conditions because maintaining a polymer under constant conditions is well known for the purpose of producing an unchanging product. Furthermore, the structure of the apparatus need not be changed to produce maintained rheological conditions, but rather maintaining such conditions is a process limitation.

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6. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Proulx (5,814,176) in view of Schrenk (3,607,509).

Proulx teaches the apparatus as discussed above.

Proulx fails to teach a second polymer source in communication with the die.

Schrenk teaches an apparatus having a second polymer source (Fig 1, and col 2, line 68 - col 3, line 14) for the purpose of forming a composite product bonded filaments (Fig 9 and col 4, lines 30-41).

It would have been obvious to one having ordinary skill in the art at the time of the Applicant's invention to have modified the invention of Proulx with a second polymer source as taught by Schrenk because it enables a bonded filaments product to be formed of a plurality of polymers.

7. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Proulx (5,814,176) in view of Kamp (4,540,537).

Proulx teaches the apparatus as discussed above.

Proulx fails to teach a second polymer source in communication with the die.

Kamp teaches an apparatus having a second polymer source (Fig 4, #41) for the purpose of forming a composite product (Fig 4 and col 4, lines 1-4).

It would have been obvious to one having ordinary skill in the art at the time of the Applicant's invention to have modified the invention of Proulx with a second polymer source as taught by Kamp because it enables a composite product to be formed.

Response to Arguments

8. Applicants' arguments filed 7/8/04 have been fully considered but they are not persuasive.

The Applicants argue that the current claim language clearly provides structural limitations that are not found in the cited references and argue that "none of the cited references disclose or suggest die openings sized, shaped and positioned in this fashion as none of the dies from these cited references create beads that contact one another as recited in the claim".

The Examiner disagrees. The structural limitations of the claims have been shown to be taught by the prior art. There is no structural limitation claimed that is lacking in the prior art. Evidence for this exists in the Applicants' argument which states "in this fashion" as a description of how the openings are sized, shaped and positioned. In what structural "fashion" are they sized, shaped and positioned? Clearly, the prior art shows openings that are sized, shaped and positioned. What physical and/or structural characteristic of the die enables and/or causes the beads to contact one another after exiting the respective die openings? Nevertheless, the beads of the prior art do contact one another after exiting the openings, as discussed above. What structural feature maintains the predetermined rheological conditions? As discussed previously, if the prior art does not maintain rheological conditions, then it would not be able to create the homogenous indefinite length product that it creates.

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Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Correspondence

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Joseph S. Del Sole whose telephone number is (571) 272-1130. The examiner can normally be reached on Monday through Friday from 8:30 A.M. to 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Wanda Walker, can be reached at (571) 272-1151. The official fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306 for both non-after finals and for after finals.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from the either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on the access to the Private PAIR system, contact the Electronic Business Center (EBC) at 886-217-9197 (toll-free).

Joseph S. Del Sole
J.S.D.

August 26, 2004